October 2003



# Terrebonne Bay Shore Protection Demonstration (TE-45)

# **Project Status**

**Approved Date:** 2001 **Cost:** \$2.6 million **Project Area:** N/A **Status:** Construction

Net Benefit After 20 Years: N/A

**Project Type:** Demonstration: Shoreline Protection

#### Location

The project is located along the northern shore of Lake Barre in Terrebonne Parish, Louisiana.

#### **Problems**

Erosion of bay shore marshes results in substantial losses of saline marsh allowing higher salinities and increased wave action to intrude northward, ultimately threatening low-salinity habitats at the northern ends of the area's interdistributary basins.

# **Restoration Strategy**

Maintenance of shoreline integrity along Terrebonne Bay is a regional strategy in the Coast 2050 plan. Given the great linear distances involved in implementing this strategy, techniques less costly than traditional rip-rap armoring will likely be needed to effectively address this problem. This demonstration project would seek to demonstrate the cost and effectiveness of alternative shore protection methods including artificial oyster reefs. Each protection measure would be installed near or on marsh shorelines to provide wave-protection.

Six techniques have been chosen based on anticipated effectiveness and cost. Three replicates of each technique will be installed as recommended by Louisiana Department of Natural Resources monitoring personnel. To better assess the effect of the oyster reef techniques, monitoring will be conducted over an 8-year period, rather than the usual 5 years.

### **Progress to Date**

The Feasibility and Preliminary Design Report was completed in November 2002. Techniques to be tested and final site selections were made at that time and were based on the surveys, geotechnical investigations and preliminary engineering and design presented in that report. Construction approval was granted in August 2003.

This project is on Priority Project List 10.



Aerial photo of a portion of the northern shoreline of Lake Barre.



The eroding shoreline of Lake Barre.

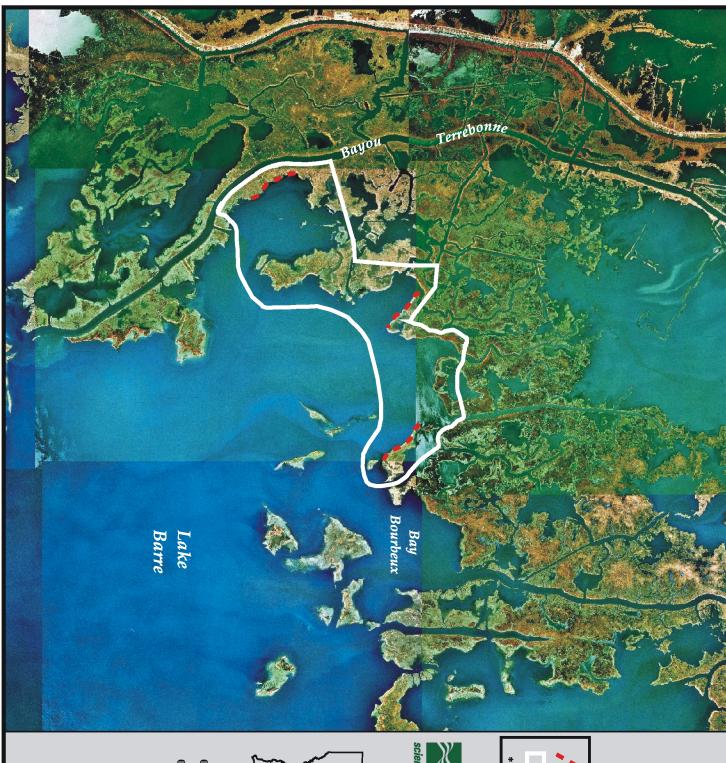
For more project information, please contact:



**Federal Sponsor:** U.S. Fish and Wildlife Service Lafayette, LA (337) 291-3100



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



# **Shore Protection Terrebonne Bay Demonstration**

(TE-45)



**Shoreline Protection \*** 



**Project Boundary** 

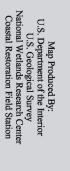
\* denotes proposed features











0.5 1 Kilometers

Miles

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangle

Map Date: August 12, 2003 Map ID: USGS-NWRC 2003-11-046 Data accurate as of: March 11, 2003